

METHOD AND APPARATUS FOR INSTALLING AND ACTUATING MOVABLE AIRFOILS, INCLUDING CANARDS

ABSTRACT OF THE DISCLOSURE

Methods and apparatuses for installing and actuating movable airfoils, such as canards. A canard in one embodiment of the invention includes an airfoil positioned external to an aircraft fuselage. The airfoil can include a first portion and a second portion (such as a flight control surface) movable relative to the first portion. A connecting portion depends from the airfoil portion and has an attachment portion configured to attach to an aircraft internal to the aircraft fuselage. A connecting portion can include first and second load paths to carry corresponding first and second load portions between the airfoil portion and the attachment portion. The connecting portion can be rotatable about a rotation axis positioned between the first and second loads paths. Accordingly, the connecting portion can be relatively compact so as to reduce the impact of the connecting portion and the volume of the fuselage.